

In the Claims

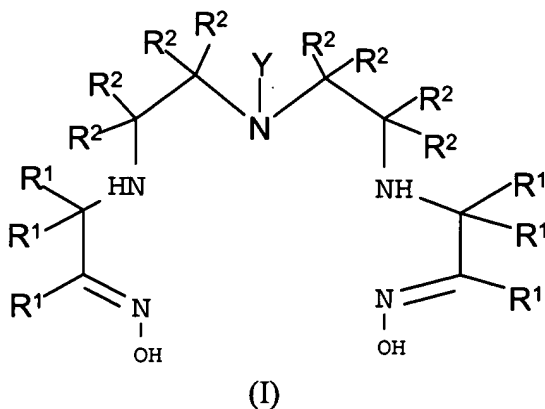
Please amend page 38, line 1 as follows:

Claims (revised) What is claimed is:

This listing of claims will replace all prior versions, and listings, including the original set of claims Published and the amended sheets attached to the IPER of claims in the application. These amendments reflect the amended claims based on the IPER.

Listing of Claims:

1. (Original) A technetium complex composition which comprises a metal complex of the radioisotope ^{94m}Tc with a ligand of Formula (I):



where:

each R^1 and R^2 is independently an R group;

x is 94m, 99 or 99m;

Y is $-(A)_n-Z$

where: Z is a biological targeting moiety of molecular weight less than 5,000;

$-(A)_n-$ is a linker group where each A is independently $-\text{CO}-$, $-\text{CR}_2-$, $-\text{CR}=\text{CR}-$, $-\text{C}\equiv\text{C}-$, $-\text{CR}_2\text{CO}_2-$, $-\text{CO}_2\text{CR}_2-$, $-\text{NR}-$, $-\text{NRCO}-$, $-\text{CONR}-$, $-\text{NR}(\text{C}=\text{O})\text{NR}-$, $-\text{NR}(\text{C}=\text{S})\text{NR}-$, $-\text{SO}_2\text{NR}-$, $-\text{NRSO}_2-$, $-\text{CR}_2\text{OCR}_2-$, $-\text{CR}_2\text{SCR}_2-$, $-\text{CR}_2\text{NRCR}_2-$, a C_{4-8} cycloheteroalkylene group, a C_{4-8} cycloalkylene group, a C_{5-12}

arylene group, or a C₃₋₁₂ heteroarylene group or a
polyalkyleneglycol, polylactic acid or polyglycolic acid moiety;

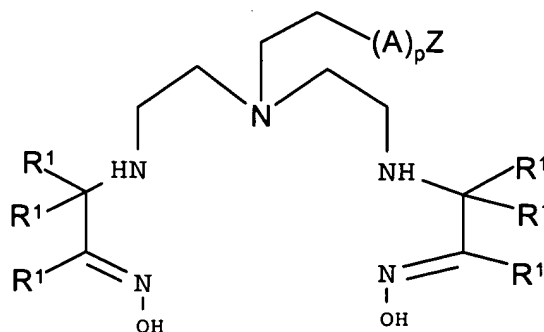
n is an integer of value 0 to 10;

each R group is independently H or C₁₋₁₀ alkyl, C₃₋₁₀ alkylaryl, C₂₋₁₀
alkoxyalkyl, C₁₋₁₀ hydroxyalkyl, C₁₋₁₀ fluoroalkyl, or 2 or more R groups,
together with the atoms to which they are attached form a carbocyclic,
heterocyclic, saturated or unsaturated ring;

wherein:

- (i) less than 10 % of the ^xTc present in the technetium complex composition comprises transient ^xTc complexes of the ligand of Formula I; and
 - (ii) less than 5 % of the ^xTc present in the technetium complex composition comprises lipophilic ^xTc complexes of the ligand of Formula I.
2. (Original) The technetium complex composition of claim 1, wherein less than 5 % of the ^xTc present in the technetium complex composition comprises transient ^xTc complexes of the ligand of Formula I.
3. (Currently amended) The technetium complex composition of ~~claims 1 or 2~~ claim 1, wherein less than 3 % of the ^xTc present in the technetium complex composition comprises lipophilic ^xTc complexes of the ligand of Formula I.
4. (Currently amended) The technetium complex composition of ~~claims 1 to 3~~ claim 1, where x is 99m.
5. (Currently amended) The technetium complex composition of ~~claims 1 to 4~~ claim 1, where Z is a peptide of 3 to 20 amino acids.
6. (Original) The technetium complex composition of claim 5, wherein the peptide of 3 to 20 amino acids is a fragment of α2-antiplasmin.

7. (Currently amended) The technetium complex composition of claim 6, wherein the fragment of $\alpha 2$ -antiplasmin comprises the tetrapeptide Asn-Gln-Glu-Gln (SEQ. ID. 11).
8. (Currently amended) The technetium complex composition of claim 7, wherein the fragment of $\alpha 2$ -antiplasmin comprises the peptide:
Asn-Gln-Glu-Gln-Val-Ser-Pro-Xaa-Thr-Leu-Leu-Lys-Gly (SEQ ID. 12),
where Xaa is Tyr or I-Tyr.
9. (Currently amended) The technetium complex composition of ~~claims 1 to 8~~ claim 1, wherein Y is
 $-\text{CH}_2\text{CH}_2-\text{NR}-(\text{A})_m-\text{Z}$, where m is an integer of value 0 to 5.
10. (Currently amended) The technetium complex composition of ~~claims 1 to 9~~ claim 1, where each R^1 is independently C_{1-3} alkyl, C_{2-4} alkoxyalkyl, C_{1-3} hydroxyalkyl, or C_{1-3} fluoroalkyl.
11. (Currently amended) The technetium complex composition of ~~claims 1 to 10~~ claim 1, where the ligand is of Formula (II):



(II)

where: each R^1 is independently C_{1-3} alkyl or C_{1-3} fluoroalkyl; and
p is an integer of value 0 to 3.

12. (Original) The technetium complex composition of claim 11, where $(\text{A})_p$ is $-\text{CO}-$ or $-\text{NR}-$.

13. (Currently amended) The technetium complex composition of ~~claims 11 and 12~~ claim 11, where each R¹ is CH₃ and (A)_p is NH and Z is Ac-Asn-Gln-Glu-Gln-Val-Ser-Pro-Xaa-Thr-Leu-Leu-Lys-Gly (SEQ ID. 12)[-], where Xaa is Tyr or I-Tyr, and Ac is N-acetyl.
14. (Currently amended) The technetium complex composition of ~~claims 1 to 13~~ claim 1, which further comprises a radioprotectant.
15. (Original) The technetium complex composition of claim 14, where the radioprotectant is *para*-aminobenzoic acid or a biocompatible salt thereof.
16. (Currently amended) A radiopharmaceutical which comprises the technetium complex composition of ~~claims 1 to 15~~ claim 1 in a form suitable for mammalian administration.
17. (Original) The radiopharmaceutical of Claim 16, where ^xTc is ^{99m}Tc.
18. (Currently amended) A kit for the preparation of the technetium radiopharmaceutical of ~~claims 16 or 17~~ claim 16, which comprises:
- (i) the ligand of Formula (I) of claim 1;
 - (ii) a biocompatible reducing agent,
 - (iii) a weak organic acid or a salt thereof with a biocompatible cation.
19. (Currently amended) The kit of claim 18, wherein the ligand is as defined in ~~Claims 5 to 10~~ claim 5.
20. (Currently amended) The kit of claim 19, where the ligand is of Formula II as defined in ~~claims 11 to 13~~ claim 11.

21. (Currently amended) The kit of ~~claims 18 to 20~~ claim 18, which further comprises a pH-adjusting agent.
22. (Currently amended) The kit of ~~claims 18 to 21~~ claim 18, wherein the biocompatible reducing agent comprises stannous.
23. (Currently amended) The kit of ~~claims 18 to 22~~ claim 18, wherein the weak organic acid is acetic acid, citric acid, tartaric acid, gluconic acid, glucoheptonic acid, benzoic acid, a phenol or a phosphonic acid.
24. (Currently amended) The kit of ~~claims 18 to 23~~ claim 18, which further comprises a radioprotectant.
25. (Original) The kit of claim 24, wherein the radioprotectant comprises *para*-aminobenzoic acid or a biocompatible salt thereof.
26. (Currently amended) The kit of ~~claims 18 to 25~~ claim 18, which is lyophilised.
27. (Currently amended) The kit of ~~claims 18 to 26~~ claim 18, which comprises:
- (i) the ligand of Formula II of claim 13;
 - (ii) a biocompatible reducing agent which comprises stannous;
 - (iii) a weak organic acid or salt thereof with a biocompatible cation which comprises methylenediphosphonic acid;
 - (iv) a radioprotectant which comprises *para*-aminobenzoic acid or a biocompatible salt thereof;
 - (v) a pH-adjusting agent which comprises sodium bicarbonate.
28. (Currently amended) A method of diagnostic imaging of thrombi using the radiopharmaceutical of claim 16, wherein the technetium complex composition is as defined in ~~claims 6 to 8~~ claim 6.